

REMARKS/ARGUMENTS

Claims 1-6, 8 and 11-13 are pending. By this Amendment, claim 7 is cancelled, and claims 1 and 11 are amended. Support for the amendments to claims 1 and 11 can be found, for example, in the present specification at page 4, lines 14 to 16 and page 8, lines 17 to 24, and in original claims 1, 7 and 11. No new matter is added. In view of the foregoing amendments and following remarks, reconsideration and allowance are respectfully requested.

Rejection Under 35 U.S.C. §112, Second Paragraph

The Office Action rejects claim 11 as indefinite under 35 U.S.C. §112, second paragraph. By this Amendment, claim 11 is amended to obviate the rejection. Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

Rejections Under 35 U.S.C. §103

A. Roeber and Kawase

The Office Action rejects claims 1-4 and 11 under 35 U.S.C. §103(a) over U.S. Patent No. 5,858,492 to Roeber et al. ("Roeber") in view of U.S. Patent No. 4,737,536 to Kawase et al. ("Kawase"). Applicants respectfully traverse the rejection.

By this Amendment, claim 1 is amended to incorporate the subject matter of claim 7, which is not subject to this rejection. Accordingly, amended claim 1 would not have been rendered obvious by Roeber and Kawase. Claims 2-4 and 11 depend from claim 1 and, thus, also would not have been rendered obvious by Roeber and Kawase. Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

B. Pfleger, Jacoby and Johoji

The Office Action rejects claims 1-5, 11 and 12 under 35 U.S.C. §103(a) over U.S. Patent No. 5,706,864 to Pfleger ("Pfleger") in view of U.S. Patent No. 5,310,584 to Jacoby et al. ("Jacoby") and U.S. Patent No. 6,562,907 to Johoji et al. ("Johoji"). Applicants respectfully traverse the rejection.

By this Amendment, claim 1 is amended to incorporate the subject matter of claim 7, which is not subject to this rejection. Accordingly, amended claim 1 would not have been rendered obvious by Pfleger, Jacoby and Johoji. Claim 2-5, 11 and 12 depend from claim 1 and, thus, also would not have been rendered obvious by Pfleger, Jacoby and Johoji. Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

C. Roeber, Kawase and Jacoby

The Office Action rejects claim 5 under 35 U.S.C. §103(a) over Roeber in view of Kawase and Jacoby. Applicants respectfully traverse the rejection.

By this Amendment, claim 1 is amended to incorporate the subject matter of claim 7, which is not subject to this rejection. Accordingly, amended claim 1 would not have been rendered obvious by Roeber, Kawase and Jacoby. Claim 5 depends from claim 1 and, thus, also would not have been rendered obvious by Roeber, Kawase and Jacoby. Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

D. Roeber, Kawase and Dupuy

The Office Action rejects claim 6 under 35 U.S.C. §103(a) over Roeber in view of Kawase and U.S. Patent No. 7,238,738 to Dupuy et al. ("Dupuy"). Applicants respectfully traverse the rejection.

By this Amendment, claim 1 is amended to incorporate the subject matter of claim 7, which is not subject to this rejection. Accordingly, amended claim 1 would not have been rendered obvious by Roeber, Kawase and Dupuy. Claim 5 depends from claim 1 and, thus, also would not have been rendered obvious by Roeber, Kawase and Dupuy. Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

E. Roeber, Kawase and Ebner

The Office Action rejects claim 7 under 35 U.S.C. §103(a) over Roeber in view of Kawase and U.S. Patent No. 6,433,087 to Ebner et al. ("Ebner"). By this Amendment, claim 7 is cancelled, rendering the rejection moot. However, Applicants provide the following comments regarding claim 1, which incorporates the subject matter of cancelled claim 7.

Claim 1 recites "[a] coolant line comprising: an outer layer comprising a polyamide molding composition; and an inner layer consisting of a polypropylene molding composition; wherein: the polyamide molding composition comprises PA612; the polypropylene molding composition comprises at least 50% by weight of polypropylene, at least 0.02% by weight of a heat stabilizer, and at least 0.01% by weight of a metal deactivator; and the polypropylene is a propene-ethene block copolymer including 0.5 to 20 % by weight of ethene in copolymerized form" (emphasis added). Roeber, Kawase and Ebner do not disclose or suggest such a coolant line.

Claim 1 has been amended to require that the polyamide molding composition includes PA612. As discussed in the present specification, the use of the polyamide PA612 is particularly desirable because PA612 has good burst resistance strength at high temperatures and good dimensional stability under humid conditions. *See, e.g.*, present specification, page 4, lines 14 to 16. Claim 1 has been further amended to require that the polypropylene composition include the combination of a heat stabilizer and a metal deactivator. This

combination of a heat stabilizer and a metal deactivator prevents the inner layer of the coolant line from becoming brittle and forming microcracks, which can ultimately lead to hydrolysis of the outer layer of the coolant line.

The Office Action concedes that Roeber and Kawase fail to disclose or suggest a coolant line including an inner layer formed of a polypropylene composition including a metal deactivator. *See* Office Action, page 12. However, the Office action asserts that Ebner discloses a polypropylene tube including such a metal deactivator and that it would have been obvious, in view of Ebner, to incorporate a metal deactivator into a line according to Roeber and Kawase. *See* Office Action, page 12. Applicants respectfully disagree.

At the outset, none of the cited references discloses employing a polypropylene composition including the combination of a heat stabilizer and a metal deactivator. The only suggestion to employ such a combination of components is found in the present specification. Ebner is directed to pipes for conveying waste water. *See, e.g., Ebner*, column 1, lines 8 to 9. The structures of Roeber, by contrast, are multi-layer structures employed in automotive contexts. The compositions of the respective structures of Roeber and Ebner are different because the structures undergo different stresses – for example, the pipe of Ebner does not face the risk of microcrack formation leading to hydrolysis of an outer polyamide layer leading to reduced bursting strength leading to failure of the structure. One of ordinary skill in the art would have no reason to believe that components of a waste water pipe as in Ebner would have any particular utility in the multi-layer structure of Roeber.

The Board of Patent Appeals and Interferences has stated "[t]he KSR Court noted that obviousness cannot be proven merely by showing that the elements of a claimed device were known in the prior art; it must be shown that those of ordinary skill in the art would have had some 'apparent reason to combine the known elements in the fashion claimed.'" *Ex parte Whalen*, 89 USPQ2d 1078, 1084 (Bd. Pat. App. & Int. 2008). The Office Action has simply

failed to articulate an apparent reason why one of ordinary skill in the art would have incorporated the metal deactivator from the composition of Ebner into the structure of Roeber. A *prima facie* case of obviousness has not been made.

As explained, claim 1 would not have been rendered obvious by Roeber, Kawase and Ebner. Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

F. Roeber, Kawase and Strelbel

The Office Action rejects claim 8 under 35 U.S.C. §103(a) over Roeber in view of Kawase and U.S. Patent No. 7,375,162 to Strelbel et al. ("Strelbel"). Applicants respectfully traverse the rejection.

By this Amendment, claim 1 is amended to incorporate the subject matter of claim 7, which is not subject to this rejection. Accordingly, amended claim 1 would not have been rendered obvious by Roeber, Kawase and Strelbel. Claim 8 depends from claim 1 and, thus, also would not have been rendered obvious by Roeber, Kawase and Strelbel. Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

G. Roeber, Kawase and Iwata

The Office Action rejects claims 12 and 13 under 35 U.S.C. §103(a) over Roeber in view of Kawase and U.S. Patent No. 7,232,297 to Iwata et al. ("Iwata"). Applicants respectfully traverse the rejection.

By this Amendment, claim 1 is amended to incorporate the subject matter of claim 7, which is not subject to this rejection. Accordingly, amended claim 1 would not have been rendered obvious by Roeber, Kawase and Iwata. Claims 12 and 13 depend from claim 1 and,

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thus, also would not have been rendered obvious by Roeber, Kawase and Iwata.

Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

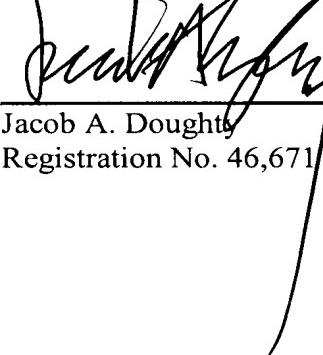
Conclusion

For the foregoing reasons, Applicants submit that claims 1-6, 8 and 11-13 are in condition for allowance. Prompt reconsideration and allowance are respectfully requested.

Respectfully submitted,

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